

Natural Sciences and Engineering Research Council of Canada

2015–16

Departmental Performance Report

The Honourable Navdeep Bains, P.C., M.P.
Minister of Innovation, Science and Economic Development

The Honourable Kirsty Duncan, P.C., M.P.
Minister of Science

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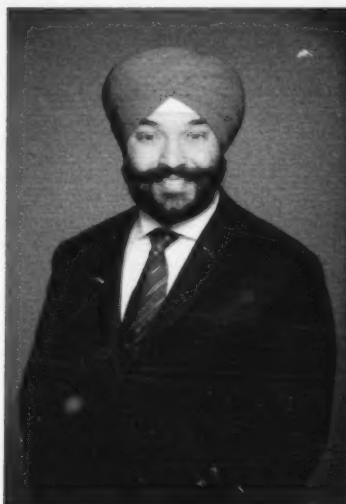
Ministers' Message

We are pleased to report the key results of the Natural Sciences and Engineering Research Council of Canada for 2015-16.

The programs of the Innovation, Science and Economic Development Portfolio work together to deliver what Canada needs to improve productivity performance, to grow the economy and to enhance prosperity and well-being. That means supporting the government's commitment to develop an Innovation Agenda, which will in turn create good-paying jobs for the middle class, drive growth across all industries, and improve the lives of Canadians. The work of the Portfolio includes helping small businesses grow through trade and innovation, promoting increased tourism to Canada, and supporting scientific research and the integration of scientific considerations in our investment and policy choices.

As we approach Canada's 150th anniversary, we pledge to continue working with stakeholders from across the country to strengthen our place in the global economy.

It is our honour to present the *2015-16 Departmental Performance Report* for the Natural Sciences and Engineering Research Council of Canada.



The Honourable Navdeep Bains
Minister of Innovation, Science
and Economic Development



The Honourable Kirsty Duncan
Minister of Science



The Honourable Bardish Chagger
Minister of Small Business and
Tourism and Leader of the Government
in the House of Commons

Results Highlights

What funds were used? (2015–16 Actual Spending)	Who was involved? (2015–16 Actual Full-Time Equivalents [FTEs])
\$1,115,653,194	403

- In 2015-16, NSERC supported more than 30,000 university students and postdoctoral fellows in the natural sciences and engineering (NSE) in Canada. More Canadian university students than ever are studying in the NSE. The economic outcomes for these students are among the best for any disciplines. NSERC funds nearly 40% of the postgraduate students in the NSE and a majority of these individuals go on to work in an R&D capacity in Canada. This support has helped Canada maintain its international rankings in the number of researchers and doctoral graduate rates.
- NSERC funds the creation of new knowledge and maintenance of a high quality Canadian broad based research capacity in the NSE. In 2015-16, nearly 10,000 university professors benefitted from NSERC Discovery Grants support. NSERC-supported scientists and engineers ensured that Canada's scientific output in the NSE is among the most productive and highest quality in the world. These researchers also collaborate extensively with international researchers and secure Canada's access to global scientific and engineering knowledge and expertise.
- NSERC fosters innovation by encouraging Canadian companies to participate and invest in postsecondary research projects. In 2015-16, NSERC partnered with 3,600 Canadian companies who contributed more than \$200 million on joint research projects with universities and colleges that resulted in innovative new products and services. In addition, more than 6,000 university students gained industrial experience from these collaborative projects.

Section I: Organizational Overview

Organizational Profile

Appropriate Minister: **Minister of Innovation, Science and Economic Development:**
The Honourable Navdeep Bains, P.C., M.P.

Minister of Science:
The Honourable Kirsty Duncan, P.C., M.P.

Minister of Small Business and Tourism and Leader of the Government in the House of Commons:
The Honourable Bardish Chagger, P.C., M.P.

Institutional Head: Dr. B. Mario Pinto (President)

Ministerial Portfolio: Innovation, Science and Economic Development

Enabling Instrument(s): Natural Sciences and Engineering Research Council Act

Year of Incorporation / Commencement: May 1, 1978

Organizational Context

Raison d'être

The Natural Sciences and Engineering Research Council of Canada (NSERC) is a key actor in making Canada a leading country of discovery and innovation. NSERC aims to maximize the value of public investments in research and development (R&D) and to advance the prosperity and quality of life of all Canadians.

In today's highly competitive global economy, NSERC plays a central role in supporting Canada's innovation ecosystem. NSERC supports research that benefits all Canadians. By connecting this innovative research to industry through its partnership initiatives, NSERC also makes it easier for the private sector to collaborate with academia and access the wealth of resources Canada's first-rate academic system has to offer.

Canada's future discoverers and innovators can realize their full potential with the support of NSERC's scholarships and fellowships programs, along with funding provided through discovery and partnership awards.

NSERC is also actively working to enhance the profile of Canadian research through national and international promotional activities and by connecting with industry.

Responsibilities

NSERC is a departmental corporation of the Government of Canada created in 1978. It is funded directly by Parliament and reports to it through the Minister of Innovation, Science and Economic Development. NSERC's Council is composed of a President and up to 18 other distinguished members selected from the private and public sectors. NSERC's President is the Chief Executive Officer. The elected Vice-President is the Chair of the Council and of its Executive Committee. NSERC's Council is advised on policy matters by various standing committees. Funding decisions are made by the President, or designate, on the basis of recommendations made by peer review committees. The functions of NSERC, based on the authority and responsibility assigned to it under the Natural Sciences and Engineering Research Council Act (1976-1977, c.24), are to:

- promote and assist research in the natural sciences and engineering, other than the health sciences; and
- advise the Minister in respect of such matters relating to such research as the Minister may refer to the Council for its consideration.

NSERC supports more than 11,000 of the most creative and productive Canadian university professors, over 30,000 highly qualified postgraduate students and fellows, and partners with 3,600 Canadian firms to transfer knowledge that creates economic wealth.

Strategic Outcome(s) and Program Alignment Architecture

1. Strategic Outcome:

Canada is a world leader in advancing, connecting and applying new knowledge in natural sciences and engineering.

1.1 1.1 People: Research, Talent

- 1.1.1 Science and Engineering Promotion
- 1.1.2 Scholarships and Fellowships
- 1.1.3 Alexander Graham Bell Canada Graduate Scholarships*
- 1.1.4 Vanier Canada Graduate Scholarships*
- 1.1.5 Banting Postdoctoral Fellowships*
- 1.1.6 Canada Research Chairs*
- 1.1.7 Canada Excellence Research Chairs*

1.2 1.2 Discovery: Advancement of Knowledge

- 1.2.1 Discovery Research
- 1.2.2 Research Equipment and Resources
- 1.2.3 Canada First Research Excellence Fund*

1.3 1.3 Innovation: Research Partnerships

- 1.3.1 Research in Strategic Areas
- 1.3.2 Industry-driven Collaborative Research and Development
- 1.3.3 Networks of Centres of Excellence*
- 1.3.4 Training in Industry*
- 1.3.5 Commercialization of Research*
- 1.3.6 College and Community Innovation

1.4 1.4 Internal Services

*Programs involving more than one granting agency.

Operating Environment and Risk Analysis

The key risks identified by NSERC for 2015-16 are highlighted below:

Key Risks

Risk	Risk Response Strategy	Link to Program Alignment Architecture
Research Portal Business Transformation The organization might not be able to take advantage of opportunities to transform its business that are made available through the Research Portal project if the project exceeds its planned costs and/or timelines.	Research Portal Governance is in place to provide bi-agency (NSERC/SSHRC) oversight for the project. Project team is adopting a standard project management methodology and taking an end-to-end approach to planning. A structured risk management framework was developed. NSERC and SSHRC are currently mapping high level business requirements for the two agencies, conducting an options analysis and will be consulting with key stakeholders in the fall of 2016.	All Programs
Organizational Evolution The changing landscape of support for research and innovation will complicate NSERC's ability to assume a leadership role as the facilitator for Canada's investments in science, technology and innovation.	NSERC's 2020 Strategic Plan was launched in December 2015. An implementation plan for the Plan's five strategic goals is being developed and will take into consideration the results of the Government of Canada's Fundamental Science Review and Innovation Agenda.	
Government-Wide Requirements NSERC will need to adapt to upcoming changes as a result of Government of Canada priorities, in addition to maintaining current business.	Departmental Security Plan is in place and is being delivered through a multi-year action plan. An Open Government Implementation Plan for NSERC and SSHRC is in place. A Corporate Employment Equity Plan is in place to ensure NSERC has a diverse and represented workforce. NSERC has migrated to My GCHR and Phoenix Government of Canada systems.	

Organizational Priorities

1. Name of Priority

People Advantage

Description

An innovative and competitive society relies on the creativity and skills of highly trained people. It is critical that the next generation of Canadians have the necessary skills in science and technology to meet the demands of today's global realities.

NSERC contributes to building a stronger culture of science, technology and innovation in Canada by providing university students and fellows support for research training, timely completion of degree and by providing opportunities for students and fellows to train in a variety of research environments that help them develop professional, job-ready skills for their future careers. Also, NSERC invests in science promotion initiatives directed to youth, women and indigenous populations to break down barriers to their participation in science and technology related careers.

Priority Type¹

Ongoing

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status	Link to the Organization's Program(s)
NSERC will continue to offer globally competitive scholarships and fellowships which foster a high level of scientific excellence in Canada and enhance Canada's reputation as a magnet for talent. To ensure that NSERC's scholarships and fellowships remain relevant and effective, NSERC will	Ongoing	Ongoing	On track	People

1. Type is defined as follows: previously committed to—committed to in the first or second fiscal year prior to the subject year of the report; ongoing—committed to at least three fiscal years prior to the subject year of the report; and new—newly committed to in the reporting year of the Report on Plans and Priorities or the Departmental Performance Report.

position these programs, as well as other training initiatives, so that they are in line with the emerging realities of the job market. NSERC will continue to regularly monitor and evaluate program performance.				
To increase gender equity in science and engineering, NSERC will continue to develop plans, in collaboration with key partners, to promote the participation of women as students, professionals, and leaders and will implement policy and program changes resulting from Tri-Agency harmonization efforts and international best practices.	Ongoing	Ongoing	On track	People
In 2015-16, NSERC will continue the development of highly qualified personnel who are "marketplace-ready" and can make immediate contributions after graduation by providing enhanced opportunities to develop technical and professional skills and to experience enriched and varied research environments. NSERC will also formally evaluate the programs that contribute to this priority.	Ongoing	Ongoing	On track	People/Discovery
In 2015-16, NSERC will finalize the development of its strategic plan, entitled NSERC 2020. This strategy will include work to develop policy directions and specific actions to enhance support for the next generation of researchers and innovators. This exercise will ensure that NSERC's training initiatives are relevant and in line with the realities of today's job market and with global trends.	Summer 2015	March 2016	Completed	People/Discovery/Innovation
Expand activities for the promotion of science to youth and other stakeholders to enhance the science culture in Canada.	Ongoing	Ongoing	On track	People
Progress Toward the Priority				

- **Completion of scholarship evaluation/CREATE program**

In 2015-16, NSERC's Scholarships and Fellowships programs, including the Collaborative Research and Training Experience (CREATE) program, were evaluated, and the conclusions demonstrated that programs were effective at supporting graduate students and post-doctoral fellows and met their objectives. The CREATE program, which has an industrial internship component was found to provide opportunities for the development of professional skills to prepare highly qualified people for the market place. Additional recommendations for some funding opportunities were made, and appropriate changes will be implemented in 2016-17.

- **Gender Summit 2017 – NSERC hosting**

In 2015-16, NSERC finalized its agreement to host the Gender Summit North America in 2017, to be held for the first time in Canada. The aims of Gender Summits, held across the globe since 2011, are to make gender equality in research settings the standard, and to discuss themes like diversity in leadership, academic perspectives, and, in this case, Canada's commitments to supporting diversity.

- **Supporting Early-Career Researchers**

In 2015-16, preliminary plans have been formed to address a gap in support between young researchers and those with more experience. Plans to *Launch the Next Generation* include reviewing the definitions of Early Career Researchers, and a working group has been formed to address the generation gap in new ways.

- **Science Odyssey Week**

In 2015-16, NSERC prepared to host Science Odyssey, a ten day Canada-wide celebration of scientists and science, with over 600 events taking place across the country. The goal of the celebrations, which have replaced the former National Science and Technology Week, are to promote science and engineering culture in Canada, to reach families and showcase the impact of Canadian researchers on Canada's economy and society.

- **Evaluation of PromoScience**

PromoScience was formally evaluated and found to be effective at fostering a science culture amongst youth and teachers. Recommendations were made with respect to the benefit of targeting science promotion support to under-represented groups such as women and indigenous communities, along with other recommendations related to program operations.

- **Expand youth science promotion**

Through the PromoScience funding opportunity, NSERC increased its support for science promotion activities, with a focus on women and indigenous communities. NSERC's 2020 Strategy includes Fostering a Science and Engineering Culture with the main thrust of promoting, celebrating and guiding science and its promotion in Canada.

2. Name of Priority

Knowledge Advantage

Description

To further position Canada as a hub of knowledge and discovery, Canada must build upon research and engineering strengths, generate new ideas and innovations, and achieve excellence by global standards.

NSERC sustains Canada's capacity to conduct world-class research in the broad areas of natural sciences and engineering by supporting scientific excellence, by seeding the creativity that drives innovation, and by supporting Canadian researchers so they can be global leaders and key players in international research collaborations. NSERC's Discovery Grants Program supports ongoing programs of research, trains students and postdoctoral fellows and recognizes the creativity and innovation that are at the heart of all research advances.

Priority Type

Ongoing

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status	Link to the Organization's Program(s)
The Government of Canada's Budget 2014 announced the creation of the Canada First Research Excellence Fund. The Fund will invest \$50 million dollars in 2015-16, with investment ramping up by \$50 million a year until 2018. By 2018-2019, the Fund will invest \$200 million per year to support Canada's postsecondary institutions in their efforts to become global research leaders. It will be administered by the Social Sciences and Humanities Research Council (SSHRC) on behalf of NSERC, SSHRC and the Canadian Institutes of Health Research (CIHR). The Fund will be competitively allocated, based on peer review, with funding allocated to NSERC following each competition should any awards align with NSERC's mandate.	April 2015	Ongoing	On track	Discovery/Innovation

NSERC will continue to promote and maintain a diversified base of high-quality research capability.	Ongoing	Ongoing	On track	Discovery/ Innovation
NSERC will continue to support advanced research and the development of early stage researchers through the Discovery Grants Program. NSERC will continue to implement recommendations from the recent program evaluation, in order to ensure it is operating effectively.	Ongoing	Ongoing	On track	Discovery
NSERC will continue to optimize its support of discovery research through refinements to its policies and programs. This includes work towards new and enhanced mechanisms designed to increase efficiency and reduce administrative workload. NSERC will explore changes to the method of allocating funds for discovery research in order to ensure that the sub-program remains effective and that the budget is used responsibly and optimally.	Ongoing	Ongoing	On track	Discovery
In 2015-16, NSERC will continue to work with SSHRC and CIHR to implement the Tri-Agency Open Access Policy on publications. NSERC will also participate in implementing the <i>Action Plan on Open Government 2014-16</i> through a set of specific activities and milestones as a part of its commitments to the <i>Open Science Implementation Plan</i>.	April 2015	Ongoing	On track	Discovery/ Innovation
NSERC will continue to support the involvement of Canadian researchers and students in international collaborations by focusing participation and engagement on initiatives and partnerships aligned with NSERC's strategic objectives.	Ongoing	On going	On track	People/Discovery/ Innovation
NSERC will continue its work to clarify its mandate as it relates to health research, and ensure consistent interpretation across programs and agencies.	Ongoing	Ongoing	On track	Discovery/People
In 2015-16, NSERC will award grants in the 3rd instalment of Discovery Frontiers on the theme of New Materials for Clean Energy and Energy Efficiency.	April 2015	January 2016	Completed	Discovery

Progress Toward the Priority

- **Canada First Research Excellence Fund Launched**

The first Canada First Research Excellence Fund (CFREF) competition took place and the results were announced in July of 2015. A total of five projects were supported, including three in the natural sciences and engineering. The second CFREF competition was also launched, and the Notice of Intent selection process was completed in January 2016.

- **Supporting a Diversified Research Base**

In total, 57 Discovery Development Grants (DDG) were offered in 2015-16. The Discovery Development Grants pilot initiative is a complementary funding opportunity to the Discovery Grants (DG) Program. Its goal is to promote and maintain a diversified base of high-quality research in small universities and provide a stimulating environment for research training in small universities across Canada.

- **Enhanced mechanisms to reduce workload and increase efficiency**

NSERC staff members have conducted a thorough review of the peer review process for Discovery Grants and have identified a number of areas where efficiencies could be achieved. To date, the External Reviewer Process including the forms have been modified and peer review committee members' workloads have been balanced across all Evaluation Groups.

- **Support Canadians in international collaborations aligned with NSERC objectives**

- In November 2015, NSERC renewed its partnership with the German Research Foundation (DFG), and expanded the scope of the Memorandum of Understanding. This will result in new opportunities for joint research efforts between Canada and Germany in the future, and will increase the number of research projects that will benefit from the partnership.
- NSERC support for the Canadian team participating in the ATLAS Physics project at the European Organization for Nuclear Research (CERN) was also renewed in 2015-16. ATLAS is one of seven particle detector experiments constructed at the Large Hadron Collider, a particle accelerator at CERN. NSERC, along with the Canadian Foundation for Innovation, signed a Memoranda of Understanding with CERN for upgrades to the ATLAS detector.

- **Discovery Frontiers competition on the theme of clean energy and energy efficiency**

In 2015-16, a third Discovery Frontiers competition was launched to support the next generation of clean energy technology and energy efficiency. A total of \$4 million over four years has been awarded to a Canada-wide team led by Dr. Gregory Jerkiewicz from Queen's University.

3. Name of Priority

Innovation Advantage

Description

Private sector innovation is integral to improving productivity and sustaining long-term economic prosperity in an increasingly competitive global marketplace. To remain competitive in today's global economy, Canada must ensure that postsecondary research strengths are able to respond to future increases in demands for technological innovation from the private sector. This aligns with the Government of Canada's Innovation Agenda for positioning Canada as a global leader in promoting research, translating ideas into new products and services, accelerating business growth and propelling entrepreneurs from start-up phase to international success.

NSERC will continue to help connect businesses to partners in the innovation system by making Canada's world-class research infrastructure, expertise and researchers available to them. These collaborative R&D partnerships provide an excellent experiential training environment for students to gain skills by working with business.

Priority Type

Ongoing

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status	Link to the Organization's Program(s)
In 2015-16, NSERC will focus on increasing the impact of its industry-driven program to foster business innovation. This focus will include the integration of similar grants and increased client services to streamline access to programs that support business.	April 2015	June 2015	Completed	Innovation
NSERC will aim to centralize access by businesses to the academic community by forming partnerships with other organizations. This includes organizations such as other government departments (e.g. National Research Council, Natural Resources Canada), industry associations (e.g. Consortium for Aerospace Research and Innovation), and non-	April 2015	May 2016	Completed partnership as listed.	Innovation

profit organizations (e.g. Mitacs). This activity will allow businesses to build synergies with Canada's R&D capacity in a more seamless manner.				
In 2015-16, NSERC's Strategy for Partnerships and Innovation will be refreshed following a successful first five years of the strategy. Planning for the renewed strategy will be part of the broader NSERC 2020 strategy after consultation with the business and academic communities. This will be followed by the development of goals and an implementation plan for an anticipated launch by the end of the fiscal year.	April 2015	April 2017	On track	Innovation
To better measure impacts of NSERC's partnership grants, an online reporting system for companies who have participated in NSERC funded projects will be implemented. This initiative will also provide an opportunity to harmonize performance measurement across all NSERC partnership grants.	April 2015	April 2017	On track	Innovation
Following the update to the Science, Technology and Innovation strategy released in December 2014, NSERC will realign its Strategic Partnerships grants to Canada's Science Technology & Innovation priority areas.	December 2015	May 2016	Completed	Innovation
Progress Toward the Priority				
Increasing impact of industry-driven programs to foster business innovation Through the integration of similar grants, the number of distinct funding opportunities in the Innovation program has been reduced by 25%. This change helped more than 3500 industrial partners who invested \$159.8 million to participate in NSERC supported grants over the past year. These contributions were up about 10% from the previous fiscal year even though Canadian business expenditures in R&D (BERD) were down over 2.5% over the same period.				

- **Centralizing access by businesses to the academic community by forming partnership with other organizations**

Over the past year NSERC has been successful in forging strategic partnerships with other organizations such as Mitacs, the Ontario Centres of Excellence, the National Research Council of Canada and the Research and Development Corporation of Newfoundland and Labrador. NSERC has signed memoranda of understanding with many of these organizations, which will allow businesses who partner with the academic community to access R&D support through a single application.

- **Renewing NSERC's Strategy for Partnerships and Innovation**

Several initiatives are currently being developed to support Research and Innovation partnerships as part of NSERC 2020. This includes examining the role of clusters in innovation, developing incentives in Partnership grants to enrich student training, and ways to enhance leveraging for both industrial and non-industry partners to increase the impact of partnered research.

- **Implementation of an on-line reporting system to measure impact of NSERC's partnership grants**

Four major funding opportunities have been on-boarded, with three more anticipated before the end of financial year 2016-17. This initiative is helping to provide more timely information about program performance, relevant to the government's interest in deliverology. Since January 2016, over 130 reports for Collaborative Research and Development grants have been completed; over 95% of companies were satisfied with the project results (objectives were achieved, expectations were met).

- **Re-aligning the Strategic Partnerships grants to Canada's Science, Technology and Innovation priority areas**

To ensure that these grants remain relevant for Canada, NSERC conducts periodic reviews of its Strategic target areas. One such review was completed in 2015. Advice and input concerning research challenges for Canada were solicited from the international research community, relevant government departments and the Canadian research community. An expert committee was established for each target area to recommend well-defined and focused research challenges for each research topic within a target area based on the input from the consultations and their own broad expertise and knowledge. The following target areas, subject to continual refinements, will be in place for the next five years starting with the 2016 competition:

- Advanced Manufacturing
- Environment and Agriculture
- Information and Communications Technologies
- Natural Resources and Energy

4. Name of Priority

Accountability

Description

NSERC is committed to ensuring and demonstrating that the results of its investments in Canadian research and training are of benefit to Canadians.

NSERC is taking a proactive stance to demonstrate its stewardship in the management of Canada's investments in natural sciences and engineering by measuring and reporting on the results and impacts of its programs, finding efficiencies, working with other departments and agencies, and promoting a culture of business excellence within the organization.

Priority Type

Ongoing

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status	Link to the Organization's Program(s)
NSERC will continue to advance a culture of business excellence in the delivery of its services and its enabling infrastructure in order to optimize operational effectiveness and improve client services.	Ongoing	Ongoing	On track	All Programs
In 2015-16, NSERC will continue to generate, disseminate, and publish performance data in a timely and informative matter in accessible and open formats where possible.	Ongoing	Ongoing	On track	All Programs
NSERC will continue with SSHRC to plan the Research Portal, a grants management system, in order to streamline the application process by providing a single point of access for applicants, reviewers, committee members, institutions and partners.	Ongoing	Ongoing	Delayed	People/Discovery
NSERC will continue to conduct regularly scheduled audits of its	Ongoing	Ongoing	On track	All Programs

operations and management to ensure efficiency and accountability. Whenever appropriate, the Corporate Internal Audit Division will conduct follow up audits to ensure recommended measures have been taken.				
Progress Toward the Priority				
• The Common Administrative Services divisions are leading more than a dozen initiatives to improve internal services. • NSERC completed the Open Government Implementation Plan that will provide the public with NSERC's data sets. • The Research Portal 1.0 project close out report was delivered. The system is in maintenance and continues to support a number of funding opportunities. • A review and impact analysis for the Strategy for Partnerships and Innovation was conducted. In addition, an economic analysis of the impact of innovation program funding on industrial partners was completed in collaboration with Statistics Canada. • The following Internal Audits have been completed: ➤ Audit of Engage Grants Funding Opportunities. ➤ Audit of HR Management.				

5. Name of Priority

Visibility

Description

Showcasing and promoting the accomplishments of Canadian researchers allows NSERC to demonstrate the value and social and economic benefits of the federal government's investments in science, technology and innovation. Promoting Canadian research increases the dissemination and application of cutting edge Canadian knowledge and research worldwide.

Priority Type

Ongoing

Key Supporting Initiatives

Planned Initiatives	Start Date	End Date	Status	Link to the Organization's Program(s)
NSERC will continue to work with like-minded organizations and those that have similar objectives to leverage resources and find efficiencies.	December 2015	Ongoing	On track	Not applicable
In 2015-16, NSERC will continue to leverage relationships with partners from the academic and business communities, as well as from key government departments. In addition, NSERC will establish new ways to connect with industry and key opinion leaders in Canada.	December 2015	Ongoing	On track	Not applicable
NSERC will also continue to be responsive and engage the Canadian research community to facilitate two-way dialogue and consultation.	December 2015	Ongoing	On track	All NSERC programs

Progress Toward the Priority

- The above priorities are ongoing and include key activities that NSERC's communications team undertakes throughout the year. Progress on each priority is measured regularly.
- These priorities contribute to the government's mandate commitments, particularly as they relate to communicating science and engineering research to the general public and other external audiences.
- NSERC continues to look for ways to improve on each priority. For example, when it comes to connecting and collaborating with like-minded organizations, NSERC has implemented an improved approach by establishing regular networking meetings, these sessions are referred to as Speak Science.
- As mentioned above, NSERC is looking at increasing opportunities to connect the science communications community. This is being done through networking and collaborating on new initiatives like Science Odyssey, formerly known as Science and Technology Week.
- Results and impacts of initiatives that support the above priority are regularly measured. In order to maximize efficiency, NSERC changes the strategy behind these initiatives on a case by case basis.

For more information on organizational priorities, see the Ministers' mandate letters.ⁱⁱ

Section II: Expenditure Overview

Actual Expenditures

Budgetary Financial Resources (dollars)

2015-16 Main Estimates	2015-16 Planned Spending	2015-16 Total Authorities Available for Use	2015-16 Actual Spending (authorities used)	Difference (actual minus planned)
\$1,086,570,325	\$1,086,570,325	\$1,120,207,107	\$1,115,653,194	\$29,082,869

*The variance is explained by additional funds for the Canada First Research Excellence Fund.

Human Resources (Full-Time Equivalents [FTEs])

2015-16 Planned	2015-16 Actual	2015-16 Difference (actual minus planned)
389	403	14

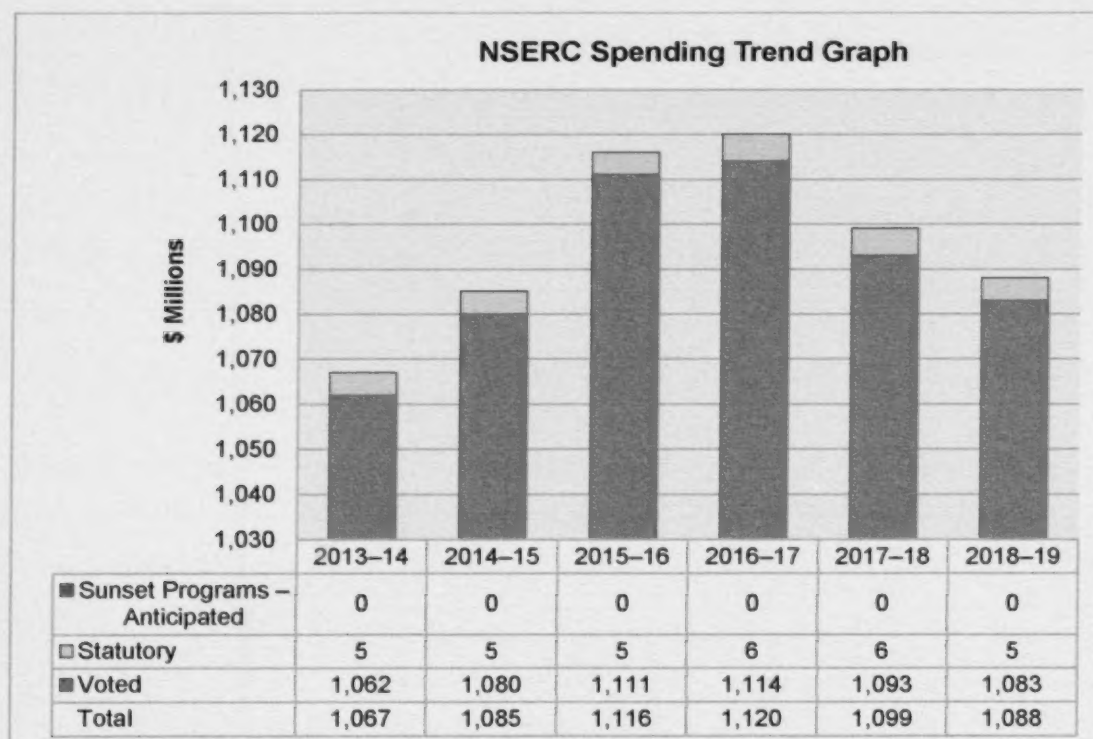
*The variance in FTEs is explained by the increase of communication and support services in the delivery of funds for the three programs.

Budgetary Performance Summary

Budgetary Performance Summary for Program(s) and Internal Services (dollars)

Program(s) and Internal Services	2015-16 Main Estimates	2015-16 Planned Spending	2016-17 Planned Spending	2017-18 Planned Spending	2015-16 Total Authorities Available for Use	2015-16 Actual Spending (authorities used)	2014-15 Actual Spending (authorities used)	2013-14 Actual Spending (authorities used)
1.1 People: Research Talent	\$287,240,355.00	\$287,316,237.00	\$287,561,563.00	\$278,754,716.00	\$284,898,318.00	\$273,271,214.00	\$272,162,729.00	\$268,221,394.00
1.2 Discovery: Advancement of Knowledge	\$403,233,837.00	\$403,374,332.00	\$435,524,043.00	\$429,632,661.00	\$434,038,301.00	\$454,997,430.00	\$417,812,704.00	\$404,299,452.00
1.3 Innovation: Research Partnerships	\$371,949,620.00	\$372,473,817.00	\$375,358,464.00	\$368,846,687.00	\$375,017,105.00	\$369,402,138.00	\$371,301,195.00	\$370,061,947.00
Subtotal	\$1,062,423,812.00	\$1,063,164,386.00	\$1,098,444,070.00	\$1,077,234,064.00	\$1,093,953,724.00	\$1,097,670,782.00	\$1,061,276,628.00	\$1,042,582,793.00
Internal Services Subtotal	\$24,146,513.00	\$23,405,939.00	\$21,740,599.00	\$21,550,394.00	\$26,253,383.00	\$17,982,412.00	\$24,168,828.00	\$24,096,237.00
Total	\$1,086,570,325.00	\$1,086,570,325.00	\$1,120,184,669.00	\$1,098,784,458.00	\$1,120,207,107.00	\$1,115,653,194.00	\$1,085,445,456.00	\$1,066,679,030.00

Departmental Spending Trend



Expenditure Profile Explanation – NSERC

The change in spending from 2013-14 reflects ongoing savings achieved through improved efficiency, partially offset by funds provided to augment the College and Community Innovation program to support for partnerships between businesses and academic researchers (Budget 2013). Variations in the spending profile since 2013-14 are largely due to additional funds to augment support for advanced research in the natural sciences and engineering (Budget 2014).

We observe a reduction in 2017-18 because planned spending does not include future competitions of tri-Agency initiatives, such as the Canada Excellence Research Chairs and Centres of Excellence for Commercialization and Research. Funds for these initiatives are appropriated following each competition based on the successful applicants' requirements. Also, the climate change and atmospheric research at Canadian postsecondary institutions (Budget 2011) is sunsetting in 2017-18.

The Budget 2015 and Budget 2016 announcements are not included in planned spending.

Expenditures by Vote

For information on the Natural Sciences and Engineering Research Council's organizational voted and statutory expenditures, consult the Public Accounts of Canada 2016.ⁱⁱⁱ

Alignment of Spending With the Whole-of-Government Framework

Alignment of 2015–16 Actual Spending With the Whole-of-Government Framework^{iv} (dollars)

Program	Spending Area	Government of Canada Outcome	2015–16 Actual Spending
1.1 People: Research Talent	Economic Affairs	An innovative and knowledge-based economy	\$273,271,214.00
1.2 Discovery: Advancement of Knowledge	Economic Affairs	An innovative and knowledge-based economy	\$454,997,430.00
1.3 Innovation: Research Partnership	Economic Affairs	An innovative and knowledge-based economy	\$369,402,138.00
Total			\$1,097,670,782

Total Spending by Spending Area (dollars)

Spending Area	Total Planned Spending	Total Actual Spending
Economic affairs	\$1,086,570,325	\$1,097,670,782
Social affairs	N/A	N/A
International affairs	N/A	N/A
Government affairs	N/A	N/A

Financial Statements and Financial Statements Highlights

Financial Statements

Links to financial statements are found on NSERC's website^v.

Financial Statements Highlights

Condensed Statement of Operations (unaudited) For the Year Ended March 31, 2016 (dollars)

Financial Information	2015–16 Planned Results	2015–16 Actual	2014–15 Actual	Difference (2015–16 actual minus 2015–16 planned)	Difference (2015–16 actual minus 2014–15 actual)
Total expenses	1,117,728,643	1,120,209,758	1,086,317,957	2,481,115	33,891,801
Total revenues	-	84,661	49,503	84,661	35,158
Net cost of operations before government funding and transfers	1,117,728,643	1,120,125,097	1,086,268,454	2,396,454	33,856,643

Condensed Statement of Financial Position (unaudited) As at March 31, 2016 (dollars)

Financial Information	2015–16	2014–15	Difference (2015–16 minus 2014–15)
Total net liabilities	7,877,069	8,669,139	(792,070)
Total net financial assets	5,366,641	5,943,768	(577,127)
Departmental net debt	2,510,428	2,725,369	(214,941)
Total non-financial assets	6,724,006	8,192,486	(1,468,480)
Departmental net financial position	4,213,578	5,467,117	(1,253,539)

Section III: Analysis of Program(s) and Internal Services

Programs

Program Title

Program 1.1: *People: Research Talent*

Description

This Program supports the attraction, retention and development of highly qualified people in the natural sciences and engineering in Canada through Chairs programs, fellowships, scholarships and stipends. These activities are essential to building the human capital required to enable a strong, globally competitive research and innovation system in Canada. Researchers, students and young people benefit from the grant funding which supports postsecondary university research as well as some outreach activities at universities, museums, science centres, and community based organizations.

Program Performance Analysis and Lessons Learned

Canada is performing relatively well on the three indicators chosen to highlight NSERC's People: Research Talent investments. In 2013, Canada ranked 6th in the total number of researchers per thousand employed relative to other G20 countries. The unemployment rate (3.2%) for occupations in the natural sciences and engineering in 2015 was less than half the general unemployment rate (6.9%). At more than 1.4 million, the natural sciences and engineering labour force has also been the fastest growing occupational group in Canada over the past 20 years. Furthermore, as at March 2016, the average hourly wage for natural sciences and engineering professions was 41% above the national average for all occupations.

Compared to the previous year, in 2013-14, bachelor enrolment in the natural sciences and engineering in Canada rose by 5% to reach nearly 185,000 students. Increasing participation of youth in university education, favourable demographics, and NSERC's Promoscience awards have all helped to push NSE bachelor's enrolment ever higher.

Through its Scholarships and Fellowships Programs including the Alexander Graham Bell Canada Graduate Scholarships, Vanier Canada Graduate Scholarships and Banting Postdoctoral Fellowships, NSERC supports a significant number of outstanding students at various stages of their university studies. In doing so, it ensures that Canada has a reliable supply of highly qualified personnel and attracts talented future researchers. One way NSERC stimulates postgraduate enrolment in the NSE in Canada is by offering Undergraduate Student Research Awards that allow Canadian undergraduate students to gain work experience in a university laboratory. Post award exit surveys reveal that these recipients are highly motivated and 73.4%

plan to pursue postgraduate education. The experience helped to encourage nearly 30% of the recipients to consider postgraduate studies as compared to their intentions before the award.

In 2013-14, NSERC supported 8,600 master's and 9,100 doctoral students compared to the enrolment of 48,400 students (36.6% of the postgraduate student population). During the same year, 9,400 foreign students enrolled in a Ph.D program in the NSE, representing a 7.6% increase from the previous year and bringing the total doctoral enrolment in the NSE at 21,600. Growing doctoral enrolment has led to Canada being ranked 7th among the G20 in terms of doctoral degree output per capita in the natural sciences and engineering in 2012. In 2015-16, NSERC funded 64 Vanier Canada Graduate Scholarships and of the scholars, 18 were international doctoral students. During the same year, 34 Banting Postdoctoral Fellowships were awarded in the natural sciences and engineering, with 10 awards going to international researchers.

Through the Chairs Programs, NSERC assists in driving Canadian research and development excellence in natural sciences and engineering. The Canada Research Chairs Program continued to offer support and helped chair holders keep pace with other Canadian researchers. Through their institutional annual reports, 91% of universities reported that the Chairs Program was important or very important to their ability to support the existing research centres and research clusters. The Canada Excellence Research Chairs (CERC) Program continued to attract accomplished researchers to help Canada build a critical mass of expertise in areas of strategic importance to Canada. In 2015-16, 74% of the institutions holding CERC awards reported significant growth over the term of the award, in areas of strategic importance to Canada, due to the CERC award.

Budgetary Financial Resources (dollars)

2015–16 Main Estimates	2015–16 Planned Spending	2015–16 Total Authorities Available for Use	2015–16 Actual Spending (authorities used)	2015–16 Difference (actual minus planned)
287,240,355	287,316,237	284,898,318	273,271,214	-14,045,023

Human Resources (Full-Time Equivalents [FTEs])

2015–16 Planned	2015–16 Actual	2015–16 Difference (actual minus planned)
36	43	7

Performance Results

Expected Results	Performance Indicators	Targets	Actual Results
Canada's workforce has the required talented and skilled researchers in natural sciences and engineering	Total researchers per thousand employed.	8.3	8.8
	Percentage difference in unemployment rate for occupations in the natural sciences and engineering vs. national unemployment rate.	1%	3.7%
	Ranking among the G20 countries in terms of earned doctoral degrees in the natural sciences and engineering per capita.	15 th	7 th

Program Title

Program 1.2: *Discovery: Advancement of Knowledge*

Description

This Program supports the creation of new knowledge and maintenance of a high quality Canadian broad based research capacity in the natural sciences and engineering through grants to researchers. The advancement of knowledge generated by these grants is necessary to fuel a strong research and innovation system in Canada that is globally competitive. Academic researchers receive funding to carry out research, to support the timely acceleration of research programs, to purchase or develop research equipment, or to facilitate their effective access to major and unique research resources.

Program Performance Analysis and Lessons Learned

Research results are usually published in peer-reviewed journals, books and conference proceedings. Publication output is a good indicator of the immediate outcome of NSERC research funding, and can be used to benchmark Canada's performance against the rest of the world.

Canadian research publication productivity is very high; the country ranks 2nd in the G20 on the per capita output of peer-reviewed journal publications in the NSE. Canada occupies the 11th position in terms of overall number of publications produced in 2014 by the G20.

The high quality and impact of Canadian research is evident in its ranking among top countries on the average number of times Canadian peer-reviewed publications are cited by other researchers. Citations are a measure of the knowledge flow and influence of a researcher's work. Based on the number of citations received by scientific papers over the three years following the publication year, a standardized measure known as the Average Relative Citation factor is calculated for each country for international comparison purposes. Based on the most current data available (2014), Canada sits in 6th position in the G20.

Canada produces 4% of the world's science and engineering publications. As such, it is important for Canadian researchers to access the latest knowledge and expertise from across Canada and the world. Collaborative research facilitates knowledge transfer and sharing among individuals, institutions, and nations. One indicator of this activity is the number of Canadian publications co-authored with foreign researchers. About 55% of Canadian publications in the NSE in 2014 had a foreign collaborator, and this percentage has been growing every year over the past decade.

Funding through the Discovery Grants Program allows Canada to build a solid capacity for basic research across a broad spectrum of natural sciences and engineering disciplines. To be funded through the Discovery Grants, researchers must demonstrate research excellence, high productivity, as well as contribute to the training of highly qualified people. Grants are awarded through a competitive peer-review process conducted by Evaluation Groups members who meet in person every year. For the most current year, 50.5% of the program's expenditures were spent on supporting the training of students at the undergraduate, master's, doctoral and postdoctoral levels, through stipends provided by NSERC-funded professors. The 2015 competition awarded Discovery Grants to 317 early-career researchers and 1,742 established researchers. The success rate (number of awards divided by the number of applicants) for the 2015 competition was 65.2%.

The discovery, innovation, and training capability of university researchers in the natural sciences and engineering is also supported by access to research equipment and major regional or national facilities. In 2015-16, 853 researchers benefited from an NSERC Research Tools and Instruments grant, a drop of 15% compared to 2014-15. NSERC also supports many research facilities among which is the Canadian Light Source facility. In 2015-16, the number of users at this facility decreased by 29, a 3.2% decrease compared to 2014-15.

The Canada First Research Excellence Fund (CFREF) is a tri-agency sub-program which was recently launched. It supports Canada's postsecondary institutions in their effort to become

global research leaders. Following the first competition held in 2015, awards in the natural sciences and engineering went to the following institutions: Université Laval's Sentinel North – Arctic sciences, optics-photonics, cardiometabolic and mental health; Université de Sherbrooke's Innovation, Partnership and Entrepreneurship Strategy: From Quantum Science to Quantum Technologies; the University of British Columbia's Institutes for Global Research Excellence: Quantum Materials and Future Technologies; the University of Saskatchewan's Designing Crops for Global Food Security; and the University of Toronto's Medicine by Design – regenerative medical technologies.

Budgetary Financial Resources (dollars)

2015-16 Main Estimates	2015-16 Planned Spending	2015-16 Total Authorities Available for Use	2015-16 Actual Spending (authorities used)	2015-16 Difference (actual minus planned)
\$403,233,837.00	\$403,374,332.00	\$434,038,301.00	\$454,997,430.00	\$51,623,098.00

Human Resources (Full-Time Equivalents [FTEs])

2015-16 Planned	2015-16 Actual	2015-16 Difference (actual minus planned)
59	82	23

*The variance is due to a change in the reallocation of internal services to programs, based on TBS's Guide on Recording and Reporting of Internal Services Expenditures effective April 1st, 2015.

Performance Results

Expected Results	Performance Indicators	Targets	Actual Results
Researchers at Canadian universities advance knowledge in the natural sciences and engineering	Ranking in the per capita output of peer-reviewed journal publications in the natural sciences and engineering among the G20 countries.	8 th	2 nd
	Ranking in the number of natural sciences and engineering publications among the G20 countries.	9 th	11 th
	Ranking in terms of average relative citation factor of Canadian publications in the natural sciences and engineering among the G20 countries.	15 th	6 th

Program Title

Program 1.3: *Innovation: Research Partnership*

Description

This Program fosters partnerships in natural sciences and engineering that facilitates the transfer of knowledge and skills to the user sector through awards that support research projects and network activities intended for socioeconomic impact. The partnerships encouraged and enabled by these awards also increase the commercialization of Canada's research through new products, services, and processes for the benefit of all Canadians.

Program Performance Analysis and Lessons Learned

In 2015-16, there was a 2.5% growth in the number of companies partnering with NSERC, compared to 13% growth in the previous year. Since the launch of the Strategy for Partnership and Innovation in 2009-10, the number of industrial partners participating in NSERC programs has grown steadily every year, reaching 3,600 in 2015-16. The majority of the top 100 R&D firms in Canada are currently partners with NSERC's funded researchers. Industrial partners contribute financially to postsecondary research projects, scholarships and fellowships.

The Association of University Technology Managers conducts a survey of intellectual property commercialization in the North American university sector every year. The following table shows that Canadian growth exceeded the 0.5% threshold for five of the nine indicators in 2014 compared to 2013.

Canadian University¹ Intellectual Property Commercialization

Commercialization Activity	2007	2008	2009	2010	2011	2012	2013	2014
Invention disclosures	1559	1481	1639	1354	1473	1439	1596	1482
Patent applications filed	790	793	789	767	729	829	877	843
U.S. patents issued	144	89	95	113	140	144	196	215
Licenses executed	611	550	608	428	485	447	349	433
Cumulative active licenses	2780	2708	2761	2855	2991	3075	3088	2771
Royalties from licensing (\$M)	\$55.7	\$50.9	\$52.0	\$49.7	\$56.0	\$61.1	\$48.9	\$80.6
Spin-off companies initiated	44	37	42	44	60	47	58	68
Spin-off companies still in business	573	564	543	575	615	544	569	408
Business contract R&D revenue (\$M) ²	\$626	\$643	\$738	\$657	\$743	\$728	\$694	\$769

Sources: Association of University Technology Managers (AUTM), Canadian Association of University Business Officers (CAUBO).

1. Sample of Canadian universities including: Alberta, British Columbia, Calgary, Dalhousie, Guelph, Laval, Manitoba, McGill, McMaster, Memorial, Montreal, Mount Allison, New Brunswick, Ottawa, Saskatchewan, Sherbrook, Simon Fraser, St. Mary's, Toronto, Waterloo, Western, and Victoria.
2. Includes all Canadian universities.

Canadian universities are good at attracting funding from companies to conduct collaborative research of importance to the firm. While overall business R&D spending by Canadian firms has stagnated for the past decade, Canadian firms have increased their funding for university R&D.

In 2015-16, activities under this program supported nearly 2,000 students and fellows in carrying out R&D in areas of national importance. Fifty-two percent of the supported projects demonstrated knowledge transfer to industry. NSERC continues to develop sector outreach strategies to better connect academic and user sectors in areas of economic importance to Canada. To date, strategies have been implemented for the aerospace and mining sectors, and two new strategies were launched for photonics and the bio-economy.

Industry funding continues to climb and has more than doubled over the past decade, starting at \$78.5 million in 2006-07 to reach \$159.8 million in 2015-16. The latest year-over-year increase in industry funding was 10%.

NSERC's commercialization support initiatives enhance the capacity of Canadian universities and colleges to transfer knowledge and technology from academic research laboratories to Canadian companies, and to accelerate the pre-commercial development of promising innovations. In 2015-16, all of the Centres of Excellence for Commercialization and Research reported technology development resulting in commercial outcomes (e.g. spin-off firms, licensing revenue, venture capital funding). Furthermore, 100% of the Idea to Innovation projects funded in 2012-13 have resulted in commercial success.

Budgetary Financial Resources (dollars)

2015-16 Main Estimates	2015-16 Planned Spending	2015-16 Total Authorities Available for Use	2015-16 Actual Spending (authorities used)	2015-16 Difference (actual minus planned)
\$371,949,620.00	\$372,473,817.00	\$375,017,105.00	\$369,402,138.00	-\$3,071,679.00

Human Resources (Full-Time Equivalents [FTEs])

2015-16 Planned	2015-16 Actual	2015-16 Difference (actual minus planned)
130	147	17

Performance Results

Expected Results	Performance Indicators	Targets	Actual Results
Canada builds more research partnerships between businesses, universities and colleges.	Percentage growth in the number of business partners annually.	5%	2.5%
	Minimum percentage growth in most of the indicators of knowledge/technology transfer (new and/or improved products/services, enhanced skills/knowledge of partner personnel, invention disclosures, university spin-offs, university licensing revenue, university R&D contract revenue, university patents).	0.5% Growth for a majority of nine indicators	Growth exceeds 0.5% for 5 of 9 indicators shown in the "Canadian University Intellectual Property Commercialization" table.

Internal Services

Description

Internal services are groups of related activities and resources that are administered to support the needs of programs and other corporate obligations of an organization. Internal services include only those activities and resources that apply across an organization, and not those provided to a specific program. The groups of activities are Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; and Acquisition Services.

Program Performance Analysis and Lessons Learned
Budgetary Financial Resources (dollars)

2015-16 Main Estimates	2015-16 Planned Spending	2015-16 Total Authorities Available for Use	2015-16 Actual Spending (authorities used)	2015-16 Difference (actual minus planned)
\$24,146,513.00	\$23,405,939.00	\$26,253,383.00	\$17,982,412.00	-\$5,423,527.00

Human Resources (FTEs)

2015-16 Planned	2015-16 Actual	2015-16 Difference (actual minus planned)
164	131	-33

Section IV: Supplementary Information

Supporting Information on Lower-Level Programs

Supporting information on the following lower-level programs is available on NSERC's website^v:

- 1.1.1 Science and Engineering Promotion
- 1.1.2 Scholarships and Fellowships
- 1.1.3 Alexander Graham Bell Canada Graduate Scholarships
- 1.1.4 Vanier Canada Graduate Scholarships
- 1.1.5 Banting Postdoctoral Fellowships
- 1.1.6 Canada Research Chairs
- 1.1.7 Canada Excellence Research Chairs
- 1.2.1 Discovery Research
- 1.2.2 Research Equipment and Resources
- 1.2.3 Canada First Research Excellence Fund
- 1.3.1 Research in Strategic Areas
- 1.3.2 Industry-driven Collaborative Research and Development
- 1.3.3 Networks of Centres of Excellence
- 1.3.4 Training in Industry
- 1.3.5 Commercialization of Research
- 1.3.6 College and Community Innovation

Supplementary Information Tables

The following supplementary information tables are available on NSERC's website^{vi}.

- ▶ Departmental Sustainable Development Strategy;
- ▶ Details on Transfer Payment Programs of \$5 Million or More;
- ▶ Internal Audits and Evaluations.

Federal Tax Expenditures

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures annually in the Report of Federal Tax Expenditures.^{vii} This report also provides detailed background information on tax expenditures, including descriptions, objectives, historical information and references to

related federal spending programs. The tax measures presented in this report are the responsibility of the Minister of Finance.

Organizational Contact Information

For further information about this report, please contact:

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Appendix: Definitions

appropriation (crédit): Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

budgetary expenditures (dépenses budgétaires): Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

Departmental Performance Report (rapport ministériel sur le rendement): Reports on an appropriated organization's actual accomplishments against the plans, priorities and expected results set out in the corresponding Reports on Plans and Priorities. These reports are tabled in Parliament in the fall.

full-time equivalent (équivalent temps plein): A measure of the extent to which an employee represents a full person-year charge against a departmental budget. Full-time equivalents are calculated as a ratio of assigned hours of work to scheduled hours of work. Scheduled hours of work are set out in collective agreements.

Government of Canada outcomes (résultats du gouvernement du Canada): A set of 16 high-level objectives defined for the government as a whole, grouped in four spending areas: economic affairs, social affairs, international affairs and government affairs.

Management, Resources and Results Structure (Structure de la gestion, des ressources et des résultats): A comprehensive framework that consists of an organization's inventory of programs, resources, results, performance indicators and governance information. Programs and results are depicted in their hierarchical relationship to each other and to the Strategic Outcome(s) to which they contribute. The Management, Resources and Results Structure is developed from the Program Alignment Architecture.

non-budgetary expenditures (dépenses non budgétaires): Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance (rendement): What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve, and how well lessons learned have been identified.

performance indicator (indicateur de rendement): A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

performance reporting (production de rapports sur le rendement): The process of communicating evidence-based performance information. *Performance reporting* supports decision making, accountability and transparency.

planned spending (dépenses prévues): For Reports on Plans and Priorities (RPPs) and Departmental Performance Reports (DPRs), planned spending refers to those amounts that receive Treasury Board approval by February 1. Therefore, planned spending may include amounts incremental to planned expenditures presented in the Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their RPPs and DPRs.

plans (plans): The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead up to the expected result.

priorities (priorités): Plans or projects that an organization has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired Strategic Outcome(s).

program (programme): A group of related resource inputs and activities that are managed to meet specific needs and to achieve intended results and that are treated as a budgetary unit.

Program Alignment Architecture (architecture d'alignement des programmes): A structured inventory of an organization's programs depicting the hierarchical relationship between programs and the Strategic Outcome(s) to which they contribute.

Report on Plans and Priorities (rapport sur les plans et les priorités): Provides information on the plans and expected performance of appropriated organizations over a three-year period. These reports are tabled in Parliament each spring.

results (résultats): An external consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead they are within the area of the organization's influence.

statutory expenditures (dépenses législatives): Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

Strategic Outcome (résultat stratégique): A long-term and enduring benefit to Canadians that is linked to the organization's mandate, vision and core functions.

sunset program (programme temporisé): A time-limited program that does not have an ongoing funding and policy authority. When the program is set to expire, a decision must be made whether to continue the program. In the case of a renewal, the decision specifies the scope, funding level and duration.

target (cible): A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

voted expenditures (dépenses votées): Expenditures that Parliament approves annually through an Appropriation Act. The Vote wording becomes the governing conditions under which these expenditures may be made.

Whole-of-government framework (cadre pangouvernemental): Maps the financial contributions of federal organizations receiving appropriations by aligning their Programs to a set of 16 government-wide, high-level outcome areas, grouped under four spending areas.



Endnotes

- i. Natural Sciences and Engineering Research Act <http://laws.justice.gc.ca/eng/acts/N-21/page-1.html#docCont>
- ii. Minister's mandate letter, <http://pm.gc.ca/eng/ministerial-mandate-letters>
- iii. Public Accounts of Canada 2016, <http://www.tpsgc-pwgsc.gc.ca/recgen/cpc-pac/index-eng.html>
- iv. Whole-of-Government Framework, <http://www.tbs-sct.gc.ca/hgw-cgf/finances/rgs-erdg/wgf-ipp-eng.asp>
- v. http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp
- vi. http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Reports-Rapports/plans-plans_eng.asp
- vii. Report of Federal Tax Expenditures, <http://www.fin.gc.ca/purl/taxexp-eng.asp>